S2000/S3000XL/S3200XL
MIDI System Exclusive Extensions
This family of samplers comprises three models...
S2000
S3000XL
3200XL

The modes (as represented by the Mode Buttons) have been redefined and there are now eleven modes available from the eight mode keys.

The disk pages have been separated into two separate LOAD and SAVE modes. A new GLOBAL mode contains MIDI, and other system parameters (such as SCSI assignments, tuning/level, format utilities, etc.).

An EDIT key can operate in association with the remaining four Modes (SINGLE, MULTI, SAMPLE and EFFECTS), to provide EDIT SINGLE, EDIT MULTI, EDIT SAMPLE and EDIT EFFECTS modes.

Much of the S3000 SYSEX system will be valid for the S2000. Additional commands will be provided to reflect the new functions.

Multi Mode
This is a major change over the S3000 family, intended to help with multi-timbral operation. Sixteen multi parts are provided. Each part contains a parameter to point to a convention "program" and another parameter to associate this part with a MIDI channel. By default, multi part 1 is associated with MIDI channel 1, part 2 with channel 2, etc. but this need not be the case. A multi part contains a number of other parameters (PRIORT, PLAYLO, PLAYHI, OUTPUT, STEREO, PANPOS, VOSCL, TRANSPOSE) similar to those found in programs which override their corresponding parameters in the associated programs.

Multi parts numbers would be arbitrary if it were not for one point. Incoming MIDI program change commands can be used to assign programs to multi parts. In this case, the MIDI channel number specified by the MIDI program change command is used to specify a multi part number, irrespective of the MIDI channel associated with that part. To avoid confusion, it is advisable that programs in memory be assigned unique program numbers.

The previous operation of MIDI program change commands (as on S3000) is no longer valid.

0x41 REQUEST MULTI DATA
0x42 MULTI DATA

Request for Multi Bytes

0xF0, MIDI System Exclusive Identifier
0x47, Akai Manufacturer code
cc, MIDI Exclusive channel
0x41, Operation code
0x48, S1000 Model Identity
mm,mm Multi part number
ss, Selector (0=header, 1=multi part)
oo,oo, Byte offset into structure
nn,nn, Number of bytes of data
0xF7 End Of Exclusive Message

Receive Multi Bytes

0xF0, MIDI System Exclusive Identifier

0x47, Akai Manufacturer code
cc, MIDI Exclusive channel
0x42, Operation code
0x48, S1000 Model Identity
mm,mm Multi part number
Ss, Selector (0=header, 1=multi part)
oo,oo Byte offset into header
nn,nn Number of bytes of data
ln,hn First byte (nibbled)
..,.. Further data
0xF7 End Of Exclusive Message

Structure of the Multi File
The MULTI file comprises two sections, the header and the multi parts. The type of data accessed by this command is determined by byte 7 of the message (the Selector). A value of 0 will access the header of the multi file. This header currently holds little useful information. A value of 1 will access data in individual multi parts. In this case bytes 5 and 6 indicate the multi part being referenced. Unlike some S3000 structures, it is not possible to obtain the whole multi file in one access. However, the whole header can be obtained in one operation, and all the data regarding the multi parts can be obtained in another.

Accessing Multi File Header

0xF0, MIDI System Exclusive Identifier
0x47, Akai Manufacturer code
cc, Midi Exclusive channel
??, Operation code (request=0x41, data=0x42)
0x48, S1000 Model Identity
0,0 Reserved
0, Selector (0=header)
oo,oo Byte offset into header
nn,nn, Number of bytes of data
0xF7 End Of Exclusive Message

Structure Of Multi File Header
Parameter: multiname
Offset: 3 bytes
Field size: 12 bytes
Description: The filename of the multifile

Parameter: fx1
Offset: 16 bytes
Field size: 1 byte
Description: The fx setup assigned to fx channel 1

Parameter: fx2
Offset: 17 bytes
Field size: 1 byte
Description: The fx setup assigned to fx channel 2

Parameter: fx3
Offset: 18 bytes
Field size: 1 byte
Description: The fx setup assigned to fx channel 3

Parameter: fx4
Offset: 19 bytes

Field size: 1 byte
Description: The fx setup assigned to fx channel 4

Parameter: fxfilename
Offset: 20 bytes
Field size: 12 bytes
Description: The filename of the associated fx file

Accessing Multi Parts Data

0xF0, MIDI System Exclusive Identifier
0x47, Akai Manufacturer code
cc, MIDI Exclusive channel
??, Operation code (request=0x41, data=0x42)
0x48, S1000 Model Identity
mm,mm Multi part number
1, Selector (1=multi part)
0,0, Reserved
nn,nn Number of bytes of data
0xF7 End Of Exclusive Message

Structure Of Multi Parts
Parameter: PRNAME
Offset: 3 bytes
Field size: 12 bytes
Range: String of characters (read-only)
Description: Name of program used for this multi part. To assign programs to multi parts it is better to use MIDI program change commands, specifying the program number of the desired program.

Parameter: PMCHAN
Offset: 16 bytes
Field size: 1 byte
Range: 255 signifies OMNI, 0 to 15 indicate MIDI channel
Description: Midi channel. MIDI messages arriving on this specified channel will be responded to by this part, irrespective of the part number.

Parameter: PRIORT
Offset: 18 bytes
Field size: 1 byte
range: 0=low 1=norm 2=high 3=hold
Description: Priority of voices playing this part.

Parameter: PLAYLO
Offset: 19 bytes
Field size: 1 byte
Range: 21 to 127 represents A-1 to G8
Description: Lower limit of play-range.

Parameter: PLAYHI
Offset: 20 bytes
Field size: 1 byte
Range: 21 to 127 represents= A-1 to G8
Description: Upper limit of play-range.

Parameter: OUTPUT
Offset: 22 bytes

Field size: 1 byte
Range:
Description: Individual output routing.

Parameter: STEREO
Offset: 23 bytes
Field size: 1 byte
Range: 0 to 99
Description: Left and right output levels.

Parameter: PANPOS
Offset: 24 bytes
Field size: 1 byte
Range: -50 to +50
Description: Balance between left and right outputs.

Parameter: VOSCL
Offset: 70 bytes
Field size: 1 byte
Range: 0 to 99
Description: Level sent to Individual outputs.

Parameter: TRANSPOSE
Offset: 75 bytes
Field size: 1 byte
Range: -50 to + 50 semitones
Description: Shift pitch of incoming midi.

Parameter: PFXCHAN
Offset: 113 bytes
Field size: 1 bytes
Range: 0 to 4
Description: Effects Bus Select
0 = OFF
1 = FX1
2 = FX2
3 = RV3
4 = RV4

Parameter: PFXSLEV
Offset: 114 bytes
Field size: 1 bytes
Range: 0 to 99
Description: Effects Send Level

Parameter: PTUNOCM
Offset: 115 bytes
Field size: 1 bytes
Range: -50 to +50
Description: Tune Offset Cents used in MULTI-mode only

[Reference Section | S1000S1100 SysEx | S2800/S3000/S3200 SysEx]